Economics and Sociology
Occasional Paper No. 1829

THE CLIENT GRADUATION HYPOTHESIS AND SUBSIDIZED CREDIT IN THE JUNTAS RURALES OF THE BANCO NACIONAL DE COSTA RICA

by

Douglas H. Graham

Martha Castillo

and

Luis Mesalles

July, 1990

Agricultural Finance Program
Department of Agricultural Economics
and
Rural Sociology
The Ohio State University
2120 Fyffe Road

Columbus, Ohio 43210-1099

Abstract

THE CLIENT GRADUATION HYPOTHESIS AND SUBSIDIZED CREDIT IN THE JUNTAS RURALES OF THE BANCO NACIONAL DE COSTA RICA

by

Douglas H. Graham, Martha Castillo, and Luis Mesalles

I. Conceptual Framework

Graduation in financial markets is a concept frequently used to describe a process whereby a low income borrower, benefiting from subsidized interest rates matures sufficiently to assume the responsibility of a normal loan repayment obligation at a market rate of interest. This is the financial market equivalent of the infant industry argument frequently used to justify tariff protection for a small domestic industry. In time, it is argued, the domestic infant industry will be able to grow and mature into a competitive firm, thereby removing any need for further protection.

The equivalent argument in financial market policy claims that an initial period of subsidized interest rates is necessary for a poor, low income client (i.e., the equivalent to tariff protection for a domestic manufacturing firm). In time this low income client, benefiting from cheap, below market interest rate loans, will presumably be able to grow and mature into a competitive borrower capable of servicing future loans at market determined rates of interest (i.e., without the protection of the interest rate subsidy).

This graduation argument has acted implicitly and explicitly, as a rationale for the adoption of subsidized interest rates for low income clients, especially for small farmers in agricultural lending programs. Data has rarely been available to test this hypothesis of graduation. It has been difficult to track the performance of a subsidized credit clientele to see if they have in fact graduated into the market rate of interest portfolio of commercial banks unrelated to the subsidized interest lending programs. Hence the argument has largely remained a hypothesis without the benefit of empirical testing.

II. The Graduation Scenario in the Banco Nacional

The Banco Nacional of Costa Rica however, does offer an opportunity to test this hypothesis since the subsidized interest rate program (i.e., the Junta rurales) has coexisted within the same overall organizational framework of the commercial credit portfolio of the same bank. Loan documentation of Junta Rural borrowers also includes information as to whether they have later moved into the market rate of interest portfolio of the "Cartera Comercial" of Banco Nacional.

To test the hypothesis of graduation a sample was taken from three distinct branches, Atenas, Guapiles, and Ciudad quesada. The universe from which the sample was drawn included all clients ever to have received loans in the Junta Rurales in these branches up to 1988. In practice this covers a period of 40 years in Atenas 91948-88), 29 years in Guapiles (1959-88), and 30 years in Ciudad Quesada (1948-88). The sample totaled 3,671 clients which represented an historically accumulated sample size of 20 percent in Atenas, 21 percent in Guapiles, and 25 percent in Ciudad Quesada. To be included in the sample clients had to have at a minimum three loan operations with at least one loan in the Junta.

III. Indicators of Graduation and Non-Graduation

Various combinations in the sequence of Junta and Commercial portfolio loans were documented, however the two most important loan histories for the graduation hypothesis were for those clients who never moved out of the subsidized Junta Rural portfolio (i.e., the classic non-graduates) and those who started out in the Junta and ended up in the commercial portfolio of the bank (i.e., the graduates). For the purpose of this succinct summary only the major features of graduation and non-graduation are highlighted.

1. Graduation was surprisingly low for the accumulated sample portfolio in the three Juntas Rurales in the study. A mere five percent of the Guapiles sample graduated into the commercial portfolio, and 12 percent in Atenas. Only Ciudad Quesada recorded a reasonable graduation rate (i.e., 25 percent). For the sample as a whole only 17 percent graduated out of the subsidized portfolio.

2. Viewed from the opposite perspective and confining our view to those who never has a loan outside the Junta Rural during their entire loan history (i.e., the extreme non-graduates), we find that 91 percent of the Guapiles sample fall into this extreme non-graduate category, 80 percent in Atenas, and 67 percent in Ciudad Quesada. Overall, 76 percent of the entire three branch sample were extreme, non-graduates. This is a remarkably high percentage, indicating a preponderant failure of subsidized credit to promote the evolution of borrowers into commercial loan contracts despite decades of help. This is equivalent of a tariff remaining in place indefinitely for an infant industry that never grows up.

3. Among the relatively small cohort who did graduate during the extended time periods in these three branches, Spearman rank correlation coefficients were estimated

relating graduation and non-graduation to selected loan characteristics. Statistically significant coefficients were recorded for client graduation when the loans were for livestock activities (rather than crops), and medium and long term loans (rather than short-term loans). Also the larger the initial loan size in the Junta, the greater the number of loan operations through time, and the greater the average accumulated volume of loans secured through time, the greater the incidence of graduation from the Junta to the commercial portfolio. These are not particularly surprising findings. To the extent that graduation does occur (and one must remember that the record of graduation is low in any event), it is more likely to occur for clients with large average loan sizes reaching the threshold constraint of the maximum loan size permitted in the Junta Rural portfolio. Larger loan sizes are also associated more with livestock than crop loans.

4. the statistically significant coefficients for non-graduates are essentially the obverse of those recorded for graduation, namely, crop loans, short term maturities, small accumulated averages sized loans and a small number of loans in the loan history of clients. In addition external funds from AID were significantly related to non-graduation. The bias here was clear. Only 14 percent of clients that drew upon AID funding sources graduated. Therefore a preponderant majority of AID supported clients did not graduate. Seventy-five (75) percent of the AID clientele never achieved the status of acquiring a loan outside of the Junta in their entire loan history. Donor supported clients with subsidized credit in the past were unable to create sufficient economic capacity to move out of the Junta Rural into the commercial portfolio.

5. the large number of non-graduates persisting in the Junta portfolio over time implies limited upward mobility through the portfolio. More importantly, it implies a shrinking opportunity for new borrowers to move into the portfolio if old borrowers do not graduate out, unless funding increases through time to service both clienteles. It is clear that from the mid 1970s onwards the opportunities for new entrants into the Junta declined substantially. Even the higher rate of graduation during this period (to be discussed shortly) was still too insignificant to overcome the marked decline in funding. The main lesson here is that the persistent failure for a preponderant majority of the Junta clientele to graduate creates a serious institutional obstacle for new clients to be incorporated into the portfolio.

IV. Concluding Remarks

A final comment is in order concerning the incidence of graduation within two distinct macroeconomic policy regimes in recent Costa Rica history. Pre-1974 Costa Rica experienced low inflation, the lack of serious balance payment crises and sound macroeconomic policies. The interest rate differential between the subsidized Junta Rural loans and those in the commercial portfolio of the Banco Nacional was relatively small, implying a marginal subsidy at best. At the same time growth in the total volume of new loans in the Junta Rural was substantial, increasing from an annual average of 106 million real colones in the period 1955-59 to an average of 243 million real colones during 1970-74. The average Junta loan size for new loans grew from 6,444 to 14,726 real colones over this same period. Graduation from the Junta to the commercial portfolio in this era of ample and growing supply of funds for Junta activity very likely represented true graduation into a substantially larger sized activity on the part of the clientele in question.

Post-1974 Costa Rica, on the other hand, presents a different picture. Rapidly increasing inflation and balance of payments crises reflected a less sound macro policy environment. The lack of adjustment in Junta interest rates increased the interest rate differential between subsidized and non-subsidized credit. However the most important development for the Junta Rural clientele was the growing shortage of Junta funds available for new loans. Inflation and negative real interest rates rapidly eroded the real value of the Junta portfolio. The volume of new loans declined from an aggregate annual average of 243 million real colones for the period 1970-74 to only 92 million real colones in 1985-87. The average Junta loan size fell from 14,726 real colones in the former period to 5,990 real colones in the latter period. At the same time the maximum loan ceiling for a Junta loan was declining in real terms. In short substantial credit rationing was occurring with a decline in both the number and the volume of new loans being serviced in the Junta Rurales.

Graduation in this scenario was less genuine and more forced than in the earlier time period. Junta clients were driven by the liquidity shortage into applying for loans from the commercial portfolio which had more ample liquidity in the late 1970s and early 1980s than did the Junta Rural program. Despite the higher interest rates, the need for funding was paramount to maintain their operations. The lesson here is clear, access to funding weighed more heavily than the higher interest costs associated with the move from the Junta to the commercial portfolio.

Thus is it not surprising to note the relatively greater incidence of graduation in the post-1974 sample than in the pre-1974 sample. However, as noted above, these graduations were carried out under substantially different circumstances. In the former period client graduation very likely was more authentic and more secure. In the latter period graduation was induced by the lack of liquidity and the greater relative need for access to credit over the cost of credit.

This lesson should not be lost on those responsible for the design of credit programs for low income clientele. Not only did subsidized interest rates not lead to any significant level of client graduation into a market rate of interest portfolio, but, in the end, access to credit was a far more important factor for prospective clients than its cost.